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(54) **FET COMPARISON ELECTRODE**

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(57) Abstract:

PURPOSE: To prolong the life of the titled comparison electrode covered with a hydrophobic high molecular film on the gate part, by treating the gate part with silane before covering (α) high molecular film and decreasing leakage of electric current by heat-treating after covering.

CONSTITUTION: At the time of preparing (α) comparison electrode using a gate insulating type field effect transistor having hydrophobic high molecular thin film such as polyvinylidene chloride, teflon, polysiloxane etc. on the gate insulate film, the gate part is sufficiently washed with pure water and organic solvent such as trichloroethylene before covering the hydrophobic high molecular film on the gate part. Next, the gate part is treated with silane treating agent shown by the formula I, II (R is alkyl radical) and is heat-treated. at 40V/150°C after covering the hydrophobic high molecular thin film. Hereby, leakage current at the time of impregnating the gate part in 0.1N NaCl aqueous solution, then applying +5V voltage between the drain and liquid, is made 30μA or less.

